

* Date: Monday, 06/10/2008 1:20:45 PM
 User: Julie Lecocq

Process Sheet

Customer :	CU-DAR001 Dart Helicopters Services	Drawing Name :	WHEEL SHAFT
Job Number :	42474		
Estimate Number :	10449		
P.O. Number :		Part Number :	D33341
This Issue :	06/10/2008	Drawing Number :	D3334 REV. C
Prsht Rev. :	NC	Project Number :	N/A
First Issue :	/ /	Drawing Revision :	C
Previous Run :	37785	Material :	
Written By :		Due Date :	20/10/2008
Checked & Approved By :	<u>JUL 08.10.08</u>	Qty:	8 Um: Each
Comment :	Est: B 05.03.02 Revised material; Added Powder Coat KJ/J LM Est Rev:C Now on Doosan Lathe 08-03-06 JLM Verified By:EC Est Rev:D Now Rev C 08-05-14 JLM Verified By:DD		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	M4140HR3500	4140 RD bar 3.500
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Comment: Qty.: 0.6563 f(s)/Unit Total : 5.2504 f(s)
 4140 HEAT TREATED BAR

Material: AISI 4140 or ASTM A304-02/A-434-BC/A193-03-Grade-B7/A29-03/A322-91 or UNS# G41400
 (M4140H-R3.500) Batch: M17393 J.F. 08/10/29 (4)

2.0	BAND SAW	BAND SAW
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Comment: BAND SAW
 1- Cut blanks: Ø3.500" Bar to 7.750" long

J.F. 08/10/29 (4)

3.0	DOOSAN LATHE	DOOSAN LATHE
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Comment: DOOSAN LATHE
 1- Turn and Mill as per Folio FA492 and Dwg D3334
 2- Deburr

J.F. 08/10/29 (4)

4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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Comment: INSPECT PARTS AS THEY COME OFF MACHINE

J.F. 08/10/29 (4)

5.0	QC8	SECOND CHECK
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Comment: SECOND CHECK

J.F. 08/10/29 (4)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 06/10/2008 1:20:45 PM
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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: WHEEL SHAFT

Job Number: 42474

Part Number: D33341

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

POWDER COATING

POWDER COATING



M 18052



(4X)

Comment: POWDER COATING

Powder Coat Fire Red (Ref: 4.3.5.10) as per QSI 005 4.3

Mask thread and bearing surface

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

7:30
of
320
8:00

M-1 08/11/01

7.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



(4)

Comment: INSPECT POWDER COAT

F2 08/11/03

8.0

PACKAGING 1

PACKAGING RESOURCE #1



(4X)

Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: 490

8/11/03

SP

9.0

QC21

FINAL INSPECTION/W/O RELEASE



08/11/04

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



MF 08-11-03

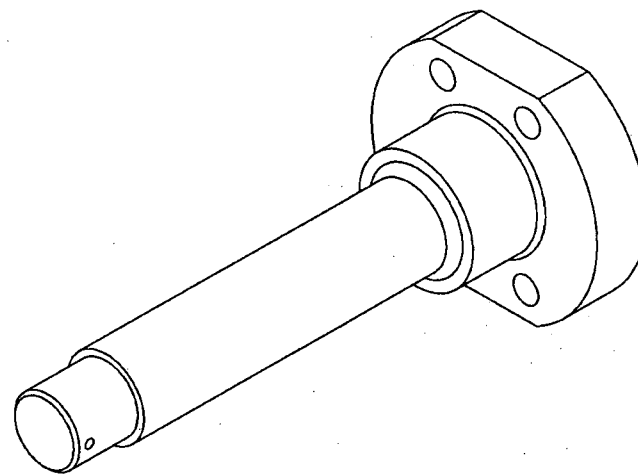
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D3334-1 WHEEL SHAFT

NOTES:

- 1) MATERIAL: AISI -4140 OR ASTM A304-02/ A-434-BC/ A193-03-GRADE-B7/ A29-03/ A322-91
OR: UNS#-G41400
(REF. DART SPEC. M4140H-R3.500)
- 2) FINISH: POWDER COAT COLOUR FIRE RED (4.3.5.10) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.010 TO 0.020 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3334-1" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 4.03 lbs

REV.	DESCRIPTION	BY	DATE
C	INCORPORATED B1 (Ø3.470 WAS 3.500). REFORMAT TO CURRENT STANDARDS. TOP VIEW ADDED. ZN C3-2.7.47 REF WAS 7.468. ZN B3-2 THREAD CALL OUT WAS 1-14 UNF. ZN C5-2 COTTER PIN HOLE LOCATION (RADIAL) CHANGED TO SHOP OPTION.	AJS	08.05.12
B	REDESIGN TO FIT NEW WHEEL ASSY.	MB	05.02.18
A	NEW ISSUE	MB	04.12.16
DESIGN	MB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.		DRAWING NO. D3334 REV. C SHEET 1 OF 2	
DATE	08.05.12	TITLE WHEEL SHAFT SCALE NTS	
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08-05-13

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WORK ORDER
NO. 4247

DART AEROSPACE LTD		Work Order: 72474
Description: Wheel Shaft		Part Number: D3334-1
Inspection Dwg: D3334, Rev: C		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☒ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
R 0.063"	$\pm .010$ "	R 0.063"	✓			
R 0.125"	$\pm .010$ "	R .125"	✓			
Ø .129"	$\pm .005$ "	Ø .129"	✓			
.200"	$\pm .010$ "	.201"	✓			
3.060"	$\pm .010$ "	3.060"	✓			
1.530"	$\pm .010$ "	1.530"	✓			
Ø .386"	$\pm .006$ "	Ø .389"	✓			
.650"	$\pm .010$ "	.650"	✓			
1.300"	$\pm .010$ "	1.300"	✓			
Ø 3.470"	$\pm .010$ "	Ø 3.470"	✓			
1.125"	$\pm .010$ "	1.124"	✓			
2.250"	$\pm .010$ "	2.253"	✓			
7.47"	$\pm .030$ "	7.465"	✓			
.045" x .45"	$\pm .010$ "	.045"	✓			
.94"	$\pm .030$ "	.938"	✓			
4.740"	$\pm .030$ "	4.733"	✓			
1.04"	$\pm .030$ "	1.043"	✓			
.750"	$\pm .010$ "	.749"	✓			
Ø 1.750"	$\pm .010$ "	Ø 1.749"	✓			
Ø 1.180"	$\pm .002$ "	Ø 1.179"	✓			
Major Dia.	Max: .9983 Min: .9829	.991"	✓			
over wires	Max: 1.0100" Min: 1.0016"	1.009"	✓			

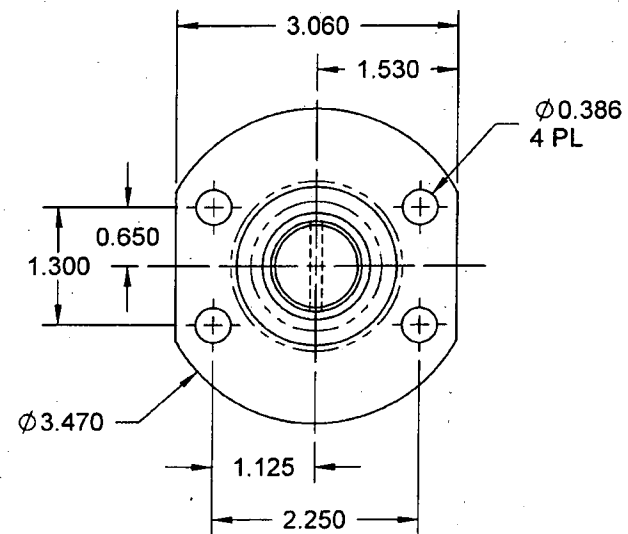
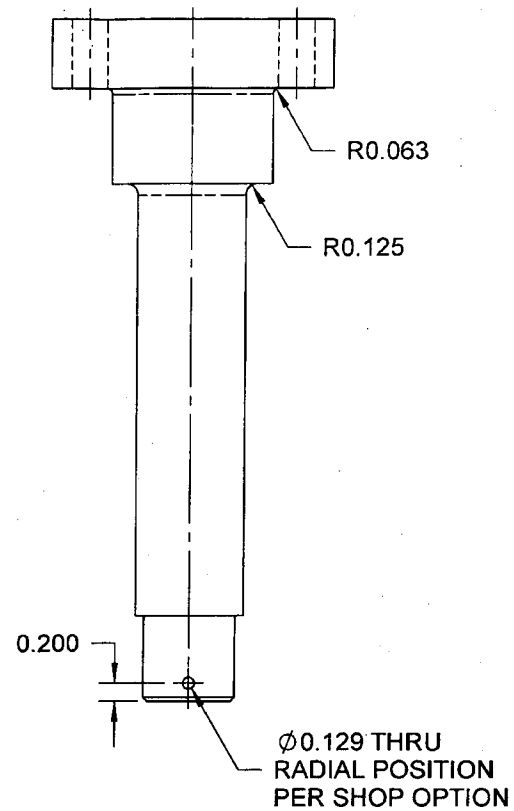
Measured by: J.F.
Date: 08/10/29

Audited by: SA
Date: 08/10/29

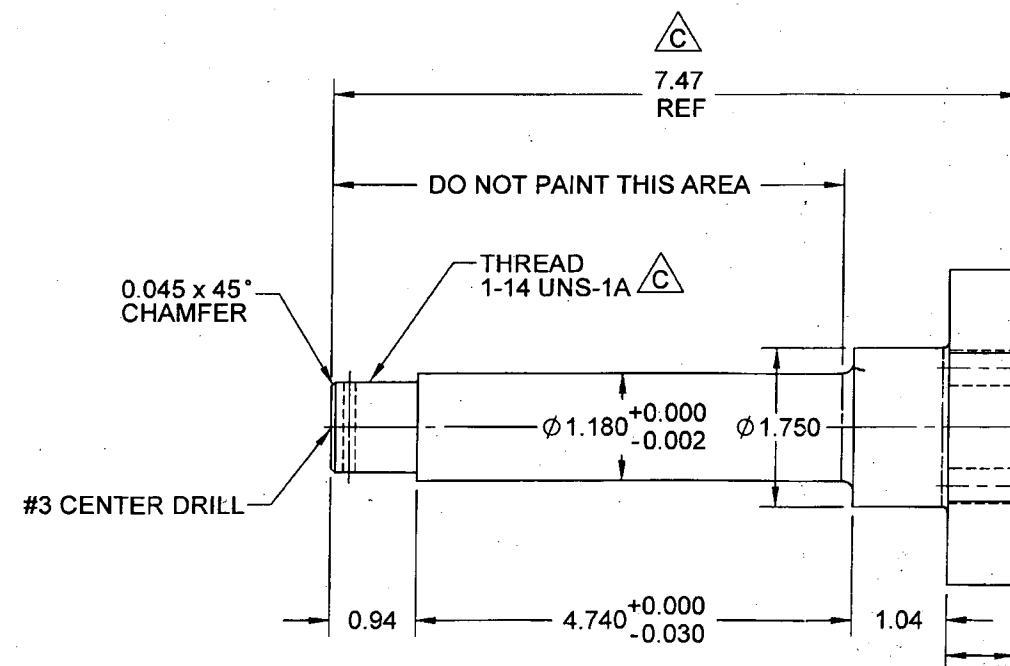
Prototype Approval: N/A
Date:

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	

HA



D3334-1 WHEEL SHAFT



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WORK ORDER
NO. 412474

RELEASED
08-05-13

DESIGN	MB	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3334	SHEET 2 OF 2
APPROVED		TITLE	SCALE
DE APPR.	N/A	WHEEL SHAFT	NTS
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